## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:			
Harvey et al.			
Application No. Unassigned		Art Unit: Unassigned  Examiner: Unassigned	
Filed:	January 4, 2002		
For:	A PAPER WEB WITH PRE- FLOCCULATED FILLER INCORPORATED THEREIN		
AMENDMENTS TO THE CLAIMS			
14. (Amended) A paper web prepared by the a process of claim 1 comprising the steps of:			
providing a pulp slurry, said slurry containing at least about 30% by dry pulp weight of a low-grade pulp, said low-grade pulp being a pulp selected from the group consisting of a groundwood pulp, a recycled pulp, and mixtures thereof;  adding a pre-flocculated filler to said slurry;  forming a paper web from said slurry; and winding said web on a reel;  said pre-flocculated filler being added to said slurry in an amount effective to provide a filler content in said web, at least a portion of said filler in said web comprising said pre-flocculated filler.			
claim 14	the process further comprising the steps of the drying said web; and sutting said web into sheets.  6. (Amended) A The paper web prepare the said the process includes further comprision.	ed in accordance with according to claim sing the step of:	
printing on said web prior to cutting said web into sheets.			

17. (Amended) A process for preparing a newspaper, the prepared by a process comprising the steps of:

providing a newsprint pulp slurry;

adding a pre-flocculated filler to said slurry;

forming a paper web from said slurry, said pre-flocculated filler being added to said slurry in an amount effective to provide a filler content in said web, at least a portion of said filler in said web comprising said pre-flocculated filler;

collecting said web on a reel, and in either order:

printing on said web; and cutting said web into sheets.

- 18. (Amended) A process The newspaper according to claim 17, wherein said web is cut into sheets after said step of printing on said web.
- 32. (Amended) A paper web prepared by the <u>a process of claim 19 comprising the steps of:</u>

providing a pulp slurry, said slurry containing at least about 30% dry pulp weight of a low-grade pulp, said low-grade pulp being a pulp selected from the group consisting of a groundwood pulp, a recycled pulp, and mixtures thereof;

adding a pre-flocculated filler to said slurry to thereby form a slurry/filler mixture;

introducing said slurry/filler mixture to the headbox of a paper-making machine;

depositing said slurry on a web-former; and

withdrawing a paper web from said headbox;

said pre-flocculated filler being added to said slurry in an amount effective to provide a filler content in said web, at least a portion of said filler in said web comprising said pre-flocculated filler.

33. (Amended) A <u>The</u> paper web prepared in accordance with claim 27 according to claim 32, the process further comprising the steps of:

drying said web; and

cutting said web into sheets.

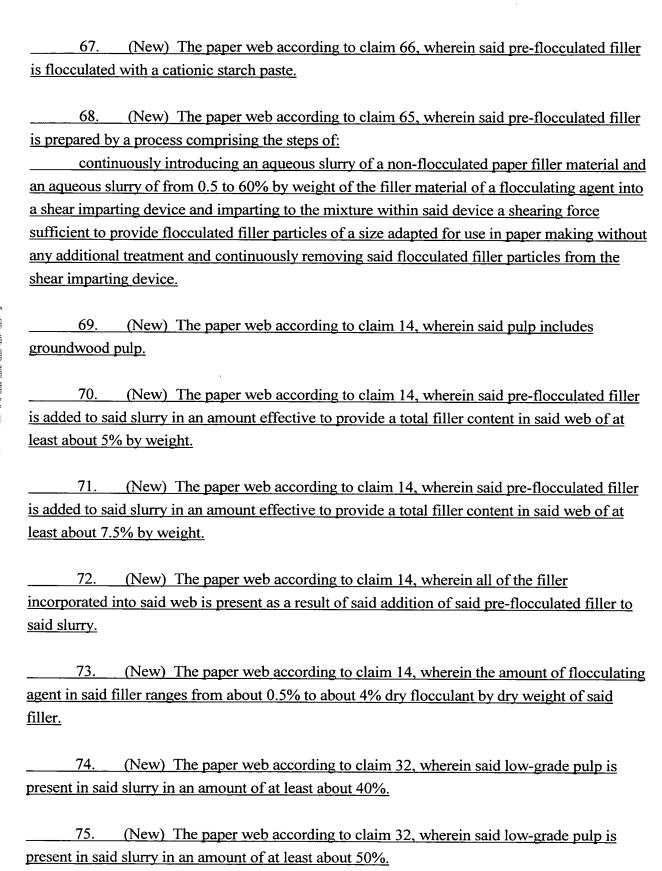
34. (Amended) A <u>The</u> paper web prepared in accordance with according to claim 33, wherein said process includes the process further comprising the step of: printing on said web prior to cutting said web into sheets.

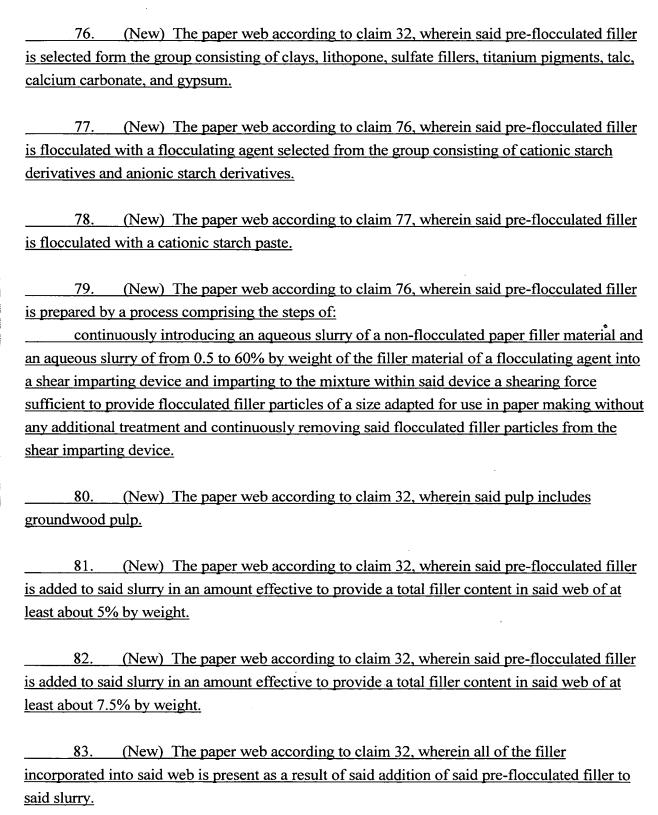
41. (Amended) The A paper web prepared by the a process of claim 40 comprising
the steps of:
providing a treated slurry of coated broke, said treated slurry having been prepared by a
process comprising the steps of:
providing a repulped slurry of coated broke, said slurry containing fibers and
particles of coating residue;
adding a chemical flocculant to said slurry in an amount effective to form floces
of said fibers and particles of coating residue; and
applying a shearing force to said slurry, said sheering force being sufficient to
limit the size of said floces to a size that is effective to enhance the rentention of said
floces in a paper web; and
withdrawing a paper web from said treated slurry.
48. (Amended) The A paper web prepared by the a process of claim 42 comprising
comprising
the steps of:
providing a treated slurry of coated broke, said treated slurry having been prepared by a
process comprising the steps of:
providing a repulped slurry of coated broke, said slurry containing fibers and particles of coating residue;
adding a chemical flocculant to said slurry in an amount effective to form floccs of said fibers and particles of coating residue; and
applying a shearing force to said slurry, said sheering force being sufficient to limit the size of said floces to a size that is effective to enhance the rentention of said
floces in a paper web;
adding said treated slurry to a fibrous pulp slurry to form a combined slurry; and
withdrawing a paper web from said combined slurry.
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55. (Amended) The A paper web prepared by the a process of claim 54 comprising
the steps of:
providing a treated slurry of coated broke, said treated slurry having been prepared by a
process comprising the steps of:
continuously introducing a repulped slurry of coated broke and a chemical
flocculant into a shear imparting device, said slurry containing fibers and particles of

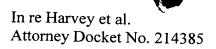
floces of said fibers and said particles of coating residue; and

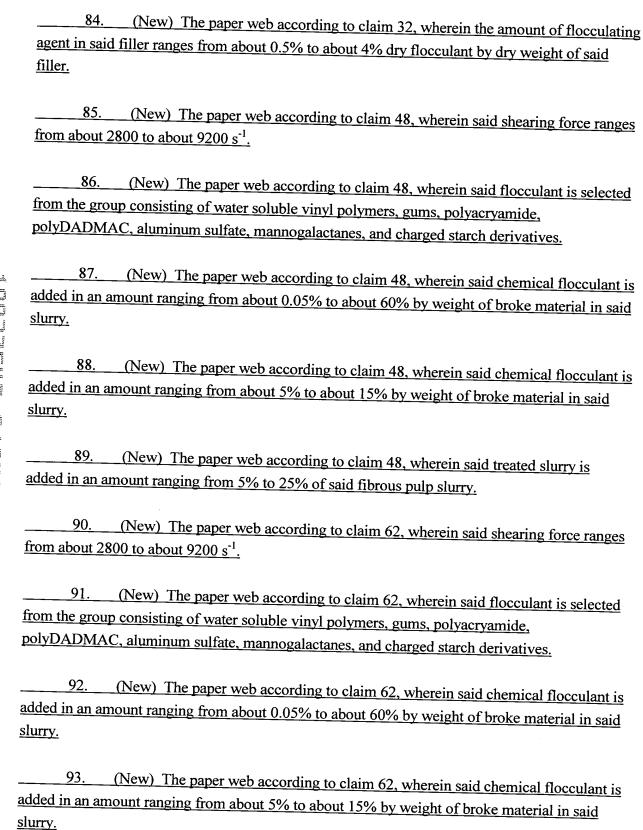
coating residue and said chemical flocculant being added in an amount effective to form

continuously withdrawing from said shear imparting device a slurry containing said floces, the shearing force imparted by said device being sufficient to limit the size of said floces to a size that is effective to enhance the retention of said floces in a paper web; and withdrawing a paper web from said slurry. 62. (Amended) The A paper web prepared by the a process of claim 56 comprising the steps of: providing a treated slurry, said treated slurry having been prepared by a process comprising the steps of: continuously introducing a repulped slurry of coated broke and a chemical flocculant into a shear imparting device, said slurry containing fibers and particles of coating residue and said chemical flocculant being added in an amount effective to form floces of said fibers and said particles of coating residue; and continuously withdrawing from said shear imparting device a slurry containing said floces, the shearing force imparted by said device being sufficient to limit the size of said floces to a size that is effective to enhance the retention of said floces in a paper web; and adding said treated slurry to a fibrous pulp slurry to form a combined slurry; and withdrawing a paper web from said combined slurry. (New) The paper web according to claim 14, wherein said low-grade pulp is 63. present in said slurry in an amount of at least about 40%. (New) The paper web according to claim 14, wherein said low-grade pulp is 64. present in said slurry in an amount of at least about 50%. (New) The paper web according to claim 14, wherein said pre-flocculated filler 65. is selected form the group consisting of clays, lithopone, sulfate fillers, titanium pigments, talc, calcium carbonate, and gypsum. (New) The paper web according to claim 65, wherein said pre-flocculated filler is flocculated with a flocculating agent selected from the group consisting of cationic starch derivatives and anionic starch derivatives.









94. (New) The paper web according to claim 62, wherein said treated slurry is added in an amount ranging from 5% to 25% of said fibrous pulp slurry.